

**BIOGRAPHICAL SKETCH**

Provide the following information for the Senior/key personnel and other significant contributors.  
Follow this format for each person. DO NOT EXCEED FIVE PAGES.

NAME: Mary Joan Roach

eRA COMMONS USER NAME (credential, e.g., agency login): mjroach

POSITION TITLE: Spinal Cord Injury Program Manager

EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)*

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
Monmouth College, Monmouth NJ	BA	5/1977	Sociology
University of Akron, Akron, OH	MA	5/1983	Sociology
University of Akron, Akron, OH	PhD	5/1987	Sociology

**NOTE: The Biographical Sketch may not exceed five pages. Follow the formats and instructions below.**

**A. Personal Statement**

As an Urban and Medical Sociologist, I take a population perspective in my research with a special interest in how neighborhood structures affect the health and well-being of those groups living in within the neighborhood. My research has primarily focused on persons with traumatic spinal cord injury (SCI). In addition, I have a keen interest in utilizing clinical health informatics to improve the quality of care and improve health outcomes for persons with a disability.

One of my main interest over the years has been to engage and include patients, clinicians and community organizations all phases of the research process. A recent example of this was a non-funded pilot project on preventative health behaviors of persons with SCI. This project was born out of focus group discussions with persons with SCI, a non-profit community organization for persons with a disability (Linking Employment Abilities and Potential), physiatrists specializing in spinal cord injury, and the Northeast Ohio Chapter of the National SCI Association. Together these stakeholders defined health issues that they, their patients, their members defined as important to them, designed survey questions to determine what persons with SCI living in the community were doing to improve their health, and collected the survey data. The project was able to produce a peer reviewed publication and is the basis for a grant proposal submission.

I have expertise in both survey and qualitative research. I have worked with small databases with fifteen people and 10 data points to large databases with 65,000 people with 500 data points.

**B. Positions and Honors****Positions and Employment**

1983-1984 Research Manager, The Annual Akron Area Survey, University of Akron, Dept. of Sociology  
 1983-1987 University of Akron, Part-Time Instructor  
 1987-1988 Case Western Reserve University, Dept. of Anthropology  
 1988-1995 Case Western Reserve University, Dept. of Medicine  
 1995-2011 MetroHealth Medical System, Dept. of Physical Medicine and Rehabilitation  
 2000-present Case Western Reserve University, Dept. of Physical Medicine and Rehabilitation  
 2002-2004 Louis Stokes VA Medical Center/Center for Health Quality Research  
 2004-present Center for Health Research and Policy at MetroHealth Medical Center

## Academic Activities

2005-2011 Reviewer. Archives of Physical Medicine and Rehabilitation  
2004-2013 Reviewer. Medical Decision Making  
2004 Reviewer. Louis Stokes VA Medical Center  
2001 Review Committee. Annual Review of Spinal Cord Injury Model Systems. US Dept. of Education, National Institute on Disability and Rehabilitation Research.

## Committee Membership

2006-2008 Research Review Committee Member. Kaiser Permanente, Cleveland, OH.  
2004-2006 Member, Department of Physical Medicine and Rehabilitation Research Committee.  
2000-2010 Chair, Annual Brain Injury Conference, MHMC, Dept. PM&R  
1999-2003 Member, Annual Rehabilitation Conference, MHMC, Dept. PM&R  
1998 Chair, ASIA Host City Committee  
1995-2012 Co-Chair, Annual Spinal Cord Injury Forum, MHMC, Dept. PM&R  
2006-2008 Member, Research Review Committee, Kaiser Permanente, Cleveland, OH  
2009-2010 Chair for the evaluation of the psychosocial variables in the National SCI Database. NIDRR SCI Model Systems Group  
2012-2013 Member, Rehabilitation sub-committee, Ohio Trauma Board, Division of EMS

## Other Research Activities

1987-1988 Consultant, The Similarities and Differences in the Psychological Adjustment of Widows and Divorcees (PI: Kitson)  
1989 Consultant, Variables Influencing Pressure Ulcer Development in Critically Ill Adults (PI: Kerber and Naccaroto)  
1989 Survey Consultant, National Coordinating Center for the SUPPORT Study  
1995 Consultant, Creating a Toolkit of Instruments to Measure End of Life Care, Responsible for evaluating Social Support Instruments (Co-PIs: Teno and Lyn)

## Academic Memberships

1995-present American Sociological Association  
1995-present Association of Spinal Cord Injury Professionals  
2000-2013 Society for Medical Decision Making

## Honors

2010 Northeast Ohio Regional Spinal Cord Injury Community Service Award  
2001 Poster Award 1<sup>st</sup> Place American Telemedicine Association  
1985 Rogler Merit Scholarship University of Akron, Dept. of Sociology  
1984 Research Award University of Akron  
1973-1977 Dean's List Monmouth College

## **C. Contribution to Science**

**1. Population Health.** My early interest address the relationship between neighborhood structure and quality of life. Specifically, the use of traffic zone and census tract data as measures of community structure was new in 1982 and even in 2002, the use of such contextual data was not being utilized in disability research. These publications provide evidence to a growing body of literature on the importance of social structure or context as an important determinant of Quality of Life and health.

a) **MJ Roach.** Community Social Structure as an Indicator of Social Integration and Its Effect on Quality of Life for Persons with a Spinal Cord Injury. Topics in Spinal Cord Injury Rehabilitation. Winter 2002; 7(3); p. 101-111.

b) Velligan D, Roberts DL, Sierra C, Fredreck MM, **Roach MJ**. What Patients with Severe Mental Illness Transitioning from Hospital to Community Have to Say About Care and Shared Decision Making. *Issues in Mental Health Nursing*. 2016. 37(6); 400-405.

v) Kelley M, **Roach MJ**, Banerjee A, Steinmetz MP, Claridge JA. Functional and long-term outcomes in severe traumatic brain injury following regionalization of a trauma system. *J Trauma Acute Care Surg*. 2015 Sep;79(3):372-7.

f) G DeJong, Hoffman J, Meade MA, Bombardier C, Deutsch A, Nemunaitis G, **Roach MJ**, Tate DG, Boninger ML, Chen Y, Hsieh J, Jette A, Wierbicky J, Chiodo A and Forcheimer M. Postrehabilitative Health Care for Individuals with SCI: Extending health Care into the Community. *Topics in SCI Rehab*, 2011. Fall 17(2):46-69.

g) **Roach MJ**. A Review of Domains of Health Disparities and Their Impact on Health Care for Persons with Spinal Cord Injury. *Topics in SCI Rehab*, 2011. Fall 17(2): 17-24.

h) **Roach MJ**. Community Social Structure as an Indicator of Social Integration and Its Effect on Quality of Life for Persons with a Spinal Cord Injury. *Topics in Spinal Cord Injury Rehabilitation*. Winter 2002; 7(3); pp. 101-111.

**2. Measuring Adjustment to Divorce and Widowhood.** I was an investigator on a project to determine the factors contributing to the adjustment of women to the stressful life event of divorce and widowhood. This was a mixed-method study using both qualitative and quantitative methods. An important finding of the study was that divorcees and widows go through an 'anticipatory grief' process that can occur for over a year prior to the filing for divorce or the death of a husband. Persons who did experience anticipatory grief had better social and psychological adjustment to the divorce or death of their husband.

a) GC Kitson, K Benson Babri, **MJ Roach** and KS Placidi. "Adjustment to Widowhood and Divorce: A Review. *Journal of Family Issues*, 1989; Vol. 10(March), pp. 5 - 32.

b) GC Kitson and **MJ Roach**. The Measurement of Social Adjustment in Widowhood and Divorce. *Older Bereaved Spouses: Research with Practical Applications*, 1989. pp. 167 - 182; (Ed.) Dale A. Lund, Hemisphere Pub. Co., N.Y.

c) **MJ Roach** and GC Kitson. The Impact of Forewarning on the Psychological Adjustment to Widowhood and Divorce. *Older Bereaved Spouses: Research with Practical Applications*, 1989. pp. 185 - 199; (Ed.) Dale A. Lund, Hemisphere Publications Co., N.Y.

### **3. Medical Decision Making with Persons Experiencing Life Threatening Chronic Conditions.**

Adjustment to a life event in the health arena involves a continual process of having to choose between various treatment options. In the 1990s, medicine began a movement to look at physician and patient preferences when determining treatment options. As an investigator on a chronic illness study and a large center study with persons with a traumatic spinal cord injury, I began to explore physician and patient preferences for treatments.

a) AF Connors, NV Dawson, HR Arkes and **MJ Roach**. Decision making in support: physician perceptions and preferences. Chapter 11. *Journal of Clinical Epidemiology*, 1990; Supplement, pp. 59S-62S. Pergamon Press, New York.

b) "U★r★in Control" A decision aid for persons with a spinal cord injury wanted information about the various bladder management programs available. The program is patient-centered, meaning that it is tailored for the person's level of injury after three simple questions are answered. My colleague and I developed this decision aid in reaction to listening to patients with SCI who expressed concern that they were not being educated about the different bladder management regimes available and were left with whatever regime they were

taught in acute rehabilitation after their injury. For some, the physician chosen regime did not fit the patient's life style or preferences.

**4. Patient-Centered Research with Persons with Traumatic Spinal Cord Injury.** As a continuation of my interest in medical decision making, I turned my efforts to further bring the patient voice to the medical decision making process. My work with persons with traumatic spinal cord injury has concentrated on documenting the consumer perspective in terms of preferences for treatment, technologies and health behaviors for reducing the risk of developing secondary conditions related to the injury. In addition, this work had entailed describing how the disconnect between what persons with SCI need and prefer and what is available in terms of health care policy, technology and access to the community affects health disparities.

a) DL Brown-Triolo, **MJ Roach**, K. Nelson and RJ Triolo. Consumer perspectives on mobility: Implications for neuroprosthesis design. J. Rehabilitation Research Development, 2002; Nov/Dec; 39(6); pp. 659-670.

b) PM Sanders, Ijzerman MJ, **Roach MJ**, Gustafson KJ. Patient preferences for next generation neural prostheses to restore bladder function. Spinal Cord. 2010 June.

c) **MJ Roach**. A Review of Domains of Health Disparities and Their Impact on Health Care for Persons with Spinal Cord Injury. Topics in SCI Rehab, 2011. Fall 17(2): 17-24.

d) **MJ Roach**, Nagy JA, Mejia, M, Nemunaitis, G. Preventive Health Care Among Community Dwelling Persons with SCI. PM&R. 2013 Jun: 5(6): 17-24.

#### **Complete List of Published Work in My Bibliography:**

<http://www.ncbi.nlm.nih.gov/sites/myncbi/11M4pmKU5Ptkz/bibliograpahy/47648125/public/?sort=date&direction=ascending>

#### **D. Research Support**

##### **Ongoing Research Support**

National Institute for Disability, Independent Living and Rehabilitation Research (NIDILRR)  
Spinal Cord Injury Model System Program Nemunaitis (PI) Roach (Co-PI) Oct. 2016-Sept. 2021  
The goal of this grant is to collect longitudinal clinical and psychosocial data on newly injured persons with a traumatic spinal cord injury. In addition, to conduct site specific research and participate in collaborative research among the 14 designated SCI Model Systems.

##### **Upcoming Support**

Craig Nielsen Foundation Nemunaitis (PI), Roach (Co-PI) January 2017-December. 2020  
Spinal Cord Injury from the Time of Injury to Participation in the Community: Phase II.  
The goal of this grant is to design a medical school course on spinal cord injury that translates Biopsychosocial theory into clinical practice.

##### **Completed Research Support**

Craig Nielsen Foundation Nemunaitis (PI) October 2014-Sept. 2015  
Spinal Cord Injury from the Time of Injury to Participation in the Community: Phase I  
The goal of this grant is to design a medical school course on spinal cord injury that translates Biopsychosocial theory into clinical practice.  
Role: Co-PI

Ohio Division of EMS            Mejia (PI)

7/01/2013-6/31/2013

Relationship between Time on a Backboard and Pressure Ulcer Development in Persons with Traumatic Spinal Cord Injuries, Co-PI (PI: Melvin Mejia) Funding source: Ohio Division of EMS.

The goal of this project was to determine if persons laying on a backboard for more than 30 minutes were at risk for pressure ulcer development than persons laying on a board for less than 30 minutes.

Role: Co-PI

Ohio Division of EMS            Mejia (PI)

6/01/11-5-31-12

Defining Trauma Outcomes through an Investigation of Associations between Trauma And Rehabilitation Registry Data

The purpose of this study was to determine trauma data (e.g. time to ED, AIS score, GCS) Were associated with long-term rehabilitation outcomes (functional independence).

Role: Co-PI